Appendix C: Detailed Comparison of Alternatives

Table C-1. Summary of Alternatives Not Carried Forward for Detailed Analysis

	Rating Unit	Alternatives Not Carried Forward for Detailed Analysis							
Criteria		Leo-Harper	Cheyenne	Shoshoni North	Shoshoni South	Hildreth North	Hildreth South	Extension ^a	
Engineering									
Total Roadway Length	Miles	1.0	1.3	1.5	1.1	0.9	1.0	0.6	
Geohazards (high denotes greatest hazard)	High, Moderate, Low	Low	Low	Low	Low	Low	Low	Low	
Anticipated Traffic Volume on Connector Roadway	ADT Volume	15,803	15,817	14,876	11,718	8,861	8,316	14,500	
Anticipated Traffic Volume on Bannock Hwy s/o Cheyenne	ADT Volume	17,241	17,638	6,415	7,673	10,066	10,532	17,511	
Safety Concerns (Roadway)	High, Moderate, Low	Moderate	High	High	Moderate	Low	Low	Moderate	
Pedestrian Safety (high denotes greatest safety)	High, Moderate, Low,	Moderate	Low	Low	Moderate	High	High	Moderate	
Construction Costs (Preliminary)	Dollars	\$17,329,000	\$18,398,000	\$21,723,000	\$18,383,000	\$15,646,000	\$17,307,000	\$2,068,000	
Right-of-Way Acquisition Costs (Preliminary)	High, Moderate, Low	Moderate	High	High	Moderate	Low	Low	Moderate	
Public Parklands									
City of Pocatello	Acres	0	0	3.6	0	0	0	6.4	
Bannock County	Acres	0	2. 6	1.1	0	0	0		
Bureau of Land Management (R&PP lease)	Acres	1.2	1.2	1.7	0	0	0	2.5	
IDFG (Edson Fichter Nature Area) [4(f)]	Acres	0	0.5	1.8	0.7	0	0	0	
4(f) Historical/Archaeological	Number of Sites	3	3	1	1	1	0	0	
Noise Impacts	Affected Receptors	3	6	4	2	1	1	3	
Vegetation Impacts									
Shrub-steppe	Acres	9.5	9.3	14.3	1.7	1.2	0.8	5.4	
Disturbed (early seral/weed dominant/cheatgrass)	Acres	0	0	0	1.5	3.6	5.7	0	
Wetland	Acres	0	0	0	0.3	0	0	0	
Wetland Impacts									
Palustrine Emergent (Wetland A)	Acres	0	0	0	0	0	0	0	
Palustrine Scrub-Shrub (Wetland B)	Acres	0	0	0	0.3	0	0	0	
Total Wetland Impact	Acres	0	0	0	0.3	0	0	0	
Wildlife/Threatened and Endangered Species	High, Moderate, Low	Low	Low	Low	Low	Low	Low	Low	

		Alternatives Not Carried Forward for Detailed Analysis						
Criteria	Rating Unit	Leo-Harper	Cheyenne	Shoshoni North	Shoshoni South	Hildreth North	Hildreth South	Extension ^a
Land Use								
Irrigated Pasture	Acres	3.5	2.5	5.8	10.7	2.9	2.9	0
Non-Irrigated Pasture	Acres	3.2	0	0	6.6	4.6	4.9	0
Farmland (Agriculture Use)	Acres	6.7	0	0	17.3	7.5	7.8	0
Commercial	Acres	0	0	0	0	0	0	0
Residential	Acres	0	2.3	4.2	3.0	1.0	1.0	0
Public Park (includes BLM Lease)	Acres	1.2	4.3	8.2	0	0	0	8.9
School District 25	Acres	0	1.1	0	0	0	0	0
Material Site (ITD Gravel Pit)	Acres	0	0	0	0	6.8	0	0
City Aquifer Recharge Area	Acres	0	0	0	0	2.1 ^b	7.1 ^b	0
Golf Course	Acres	0	0	0	2.8	0	0	0
Undeveloped	Acres	9.5	9.3	14.3	3.2	4.8	6.5	5.5
Displacements	Number of Landowners Affected	0	8	6	2	0	0	0
Visual Impacts	High, Moderate, Low	High	High	High	Moderate	Moderate	Moderate	High
Land Ownership								
U.S. Bureau of Land Management	Acres	1.8	2.1	2.3	0	0	0	1.9
State of Idaho	Acres	0.9	2.1	2.8	1.8	9.0	0.1	0.7
City of Pocatello	Acres	3.3	0.2	3.7	0	2.2	7.4	0
Private	Acres	13.4	15.0	25.3	26.5	9.7	9.9	2.4
Union Pacific Railroad	Acres	2.9	2.3	1.2	1.1	1.1	1.2	0
Bannock County	Acres	0	2.6	1.1	0	0.2	0	6.4
School District 25	Acres	0	1.1	0	0	0	0	0
Idaho Power	Acres	0	0	0	0.3	0	0	0
Fishery and Aquatic Resource Impacts	High, Moderate, Low	Low	Low	Low	Low	Low	Low	Low

All alternatives shown are alternatives not carried forward for detailed analysis. The Leo-Harper and Shoshoni South Alternatives are shown prior to refinement.

^a Alignment option for Cheyenne Avenue, Shoshoni North, and Leo-Harper Alternatives to avoid tunneling under I-15.

^b Environmental fatal flaw; alternative eliminated.

Table C-2. Summary of Alternatives Carried Forward for Detailed Analysis

		Final Build Alternative	
Criteria	Rating Unit	Leo-Harper	
Engineering			
Total Roadway Length	Miles	0.99	
Geohazards (high denotes greatest hazard)	High, Moderate, Low	Low	
Anticipated Traffic Volume	ADT Volume	16,097	
Safety Concerns (Roadway)	High, Moderate, Low	Moderate	
Safety to Pedestrians (high denotes greatest safety)	High, Moderate, Low	Moderate	
Construction Costs (Preliminary)	Dollars	\$18,494,000	
Acquisition Costs (Preliminary)	High, Moderate, Low	Moderate	
Public Parklands			
City of Pocatello	Acres	0	
Bannock County	Acres	0	
Bureau of Land Management (R&PP lease)	Acres	2.4	
IDFG (Edson Fichter Nature Area) [4(f)]	Acres	0	
4(f) Historical/Archaeological	Number of Sites	0	
Noise Impacts	Affected Receptors	3	
Vegetation Impacts			
Shrub-steppe	Acres	7.8	
Disturbed (early seral/weed dominant/Cheatgrass)	Acres	0	
Wetland	Acres	0	
Wetland Impacts			
Palustrine Emergent (Wetland A)	Acres	0	
Palustrine Scrub-Shrub (Wetland B)	Acres	0	
Total Wetland Impact	Acres	0	
Wildlife/Threatened and Endangered Species	High, Moderate, Low	Low	

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		Final Build Alternative
Criteria	Rating Unit	Leo-Harper
Land Use		
Irrigated Pasture	Acres	2.6
Non-Irrigated Pasture	Acres	2.6
Farmland (Agriculture Use)	Acres	6.4
Commercial	Acres	0
Residential	Acres	1.9
Public Park (includes BLM Lease)	Acres	2.5
School District 25	Acres	0
Material Site (Inactive)	Acres	0
City Aquifer Recharge Area	Acres	0
Golf Course	Acres	0
Undeveloped	Acres	12.6
Displacements	Number of Landowners Affected	0
Visual Impacts	High, Moderate, Low	High
Land Ownership		
U.S. Bureau of Land Management	Acres	2.4
State of Idaho	Acres	1.9
City of Pocatello	Acres	2.7
Private	Acres	5.8
Union Pacific Railroad	Acres	1.8
Bannock County	Acres	0
School District 25	Acres	0
Idaho Power	Acres	0
Fishery and Aquatic Resource Impacts	High, Moderate, Low	Low
The alternative shown is the final build alternative.		